

LEAN SUPPLY CHAIN MANAGEMENT

WHAT IS LEAN SUPPLY CHAIN MANAGEMENT?

A lean supply chain process is one that has been streamlined to reduce and eliminate waste or non-value added activities to the total supply chain flow and to the products moving within the supply chain. Waste can be measured in time, inventory and unnecessary costs. Value added activities are those that contribute to efficiently placing the right final product at the customer's receiving dock. The supply chain and the inventory contained in the chain should flow. Any activity that stops the flow should create value. Any activity that touches inventory should create value.

WHAT MUST BE DONE TO BE LEAN?

Supply chains gain waste and non-value added activities for many reasons, both internal to the company and external. Regaining the lean supply chain may mean addressing many of the same issues that created the problems of extra and unneeded time, inventory and costs. In addition, organizations should focus on artificial peaks in workload that are often apparent at the end of month and quarter. Such peaks should ideally be smoothed to regulate the flow of activities through the supply chain.

The ideal approach is to design the perfect supply chain and fit your company's operation onto it. Supply chain management is meant to reduce excess inventory in the supply chain. A supply chain should be demand driven. It is built on the pull approach of customers pulling inventory, not with suppliers pushing inventory. Excess inventory reflects the additional time with the supply chain operation. So the perfect supply chain would be lean with removing wasteful time and inventory.

A supply chain should also have the right management tools in place to control waste and inventory levels. Effective forecasting, scheduling, execution and reporting tools form a powerful system for managing (SFM). An effective SFM will identify barriers that delay or impede flow across the supply chain.

To develop a lean supply chain, organizations should:

- Understand that lean is an ongoing, continuous improvement approach as compared to business process reengineering which can be viewed as a one-time change.
- Analyze the total supply chain process, not just the outbound part or just the inbound part.
- Map the process, and assess for gaps or redundancies that create time and waste.
- Realize cause-effect impacts. High freight cost, for example, can be a problem or a symptom. Inventory can be a problem or, more often, a symptom of a problem.
- Drive for root causes, not symptoms.
- Ask customers about how well your supply chain operates. Since the supply chain is built on customer pull, the end user has a vital view.
- Use event management and exception management to add management and control. Supply chain complexity increases the need for event and exception management technology and capability.
- Observe the effect that time has on inventory and on an effective process.

- Collaborate with suppliers. It is a requirement, not an option; and it is a two-way exchange.
- Demand supplier performance. It is vital to a lean supply chain operation.
- Measure the present process as total cycle time, costs and inventory (both in dollars and units) and the inventory turns.
- Integrate the supply chain. Breaks in the flow, both internal and external, can be pockets of waste.
- Identify non-value added activities, their effect and their cause.
- Know that technology cannot overcome process flaws.
- Involve your front-line employees, suppliers, service providers-to provide input on present supply chain effectiveness and for improvements.
- Incorporate technology, such as supply chain execution technology, as part of the process improvement. It is an enabler. Understand where standard ERP and other software may and may not enable a lean supply chain.
- Make the supply chain visible; recognize that blind spots can be areas of waste.
- Probe for uncertainties that create inventory and other waste. Forecasting accuracy is one area of opportunity.
- Investigate reasons why product does not flow in a more consistent and predictable manner. Order and shipment releases from suppliers, for example, can create inbound flows that can mitigate time and inventory buffers.

MAKING PROBLEMS VISIBLE

The Japanese concept of 'yokoten' implies a more horizontal, "peer-to-peer" model in which new adopters of change are encouraged to go and see for themselves what others are doing, apply those learnings appropriately to their situation, and drive continuous improvement by expanding on the previous knowledge, in turn sharing it with others.

Regardless of your path on the Lean journey, focusing on the accumulation and transfer of knowledge and learnings as embodied in the concept of yokoten can have a tremendous impact on the overall results and success of the Lean programs.

Trident uses an observation approach to encourage front-line management across inter-related departments to 'see for themselves what others are doing' Our consultants typically spend approximately 1,000 hours observing the key processes in a lean supply chain project, and we design a program where front-line client management gets 'front-row' exposure to the core problems across the supply chain – from sales to customer service, warehousing, shipping, receiving, purchasing and everything in between. This helps to drive sustainable, continuous improvement across the entire supply chain.

CONCLUSION

Lean supply chain management is not about "fixing" what someone else is doing wrong. It is about identifying, observing and eliminating waste as measured in time, inventory and cost across the complete supply chain. This requires continuous effort and improvement.

A lean supply chain can reduce lost time by 10 to 40%, inventories by 10% to 30% and costs by 10% to 25%. Continuous improvements can take payback to much higher levels. This is a significant benefit that can be accomplished in as little as 15-30 calendar weeks.